Title (en)

THERMAL MEMORY IN A FAULT POWERED SYSTEM

Title (de)

WÄRMESPEICHER IN EINEM FEHLERBETRIEBENEN SYSTEM

Title (fr)

MÉMOIRE THERMIQUE DANS UN SYSTÈME ALIMENTÉ DÉFAILLANT

Publication

EP 2638610 A2 20130918 (EN)

Application

EP 11790814 A 20111021

Priority

- US 94561610 A 20101112
- US 2011057197 W 20111021

Abstract (en)

[origin: US2012123762A1] A circuit breaker system for providing thermal protection to a conductor conducting current from a power source to a load. While the power source is connected to the load, a microcontroller is powered by the current passing through the conductor to thermally model the temperature of the conductor. If the microcontroller determines that the temperature of the conductor has risen to an undesirable or unsafe level, the circuit breaker disconnects the power source from the load and the current no longer passes through the conductor. With no current passing through the conductor, the microcontroller no longer receives power from the conductor. Instead, the microcontroller continues to model the temperature of the conductor as the conductor cools to an ambient temperature by receiving power from an energy storage device. Accordingly, the microcontroller continuously models the temperature of the conductor until the temperature of the conductor cools to the ambient temperature.

IPC 8 full level

H02H 3/08 (2006.01); **G06F 17/50** (2006.01)

CPC (source: EP US)

H02H 1/06 (2013.01 - EP US); **H02H 6/005** (2013.01 - EP US); **H02H 7/226** (2013.01 - EP US); H02H 3/085 (2013.01 - EP US)

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2012123762 A1 20120517; **US 8665574 B2 20140304**; BR 112013011695 A2 20160809; BR 112013011695 B1 20200804; CN 103201922 A 20130710; CN 103201922 B 20160504; EP 2638610 A2 20130918; EP 2638610 B1 20190911; EP 2638610 B8 20191016; WO 2012064487 A2 20120518; WO 2012064487 A3 20120927

DOCDB simple family (application)

US 94561610 A 20101112; BR 112013011695 A 20111021; CN 201180053545 A 20111021; EP 11790814 A 20111021; US 2011057197 W 20111021